Question Paper

Exam Date & Time: 05-Sep-2019 (10:00 AM - 12:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS) MBBS PHASE - I STAGE - I DEGREE EXAMINATION - AUGUST/SEPTEMBER 2019 Thursday, September 05, 2019 Anatomy [M1ANT]

ANATOMY - PART - II (ESSAY)

Section Duration: 120 mins

Max. marks: 60

Answer all the questions Draw diagrams wherever appropriate

1. Classify the muscles according to their structure and list the differences between them.

(1.5+3.5 = 5 marks)

- 2. Describe the hip joint under the following headings:
- 2A. Type and subtype.
- 2B. Names of the ligaments.
- 2C. Muscles producing each of the movements.

(1+1+3 = 5 marks)

3. What is carpal tunnel? What are its boundaries? Name the structures passing through it. Explain its clinical significance.

(0.5+1+2.5+1=5 marks)

4. Describe the development and fate of somites.

(5 marks)

Mention the origin, course and termination of axillary artery. Name the branches of each part of the axillary artery.

[(1+0.5+1)+1.5=4 marks]

- 6. A 17-year-old girl visited her dermatologist because of severe acne on the face. On examination, it was found that a small abscess was present in the area between the eye and nose. The patient was given antibiotics and was warned not to press the abscess.
- 6A. What do you call this area between the eye, nose and upper lip?
- 6B. What is the route taken by the infection to spread from this area to the cavernous sinus?
- 6C. Describe the relations of cavernous sinus.

(1+1+2=4 marks)

7. Describe the features of the lateral wall of nasal cavity.

(4 marks)

8. Name the structures within the parotid gland. Mention the course and termination of parotid duct. What is the origin and course of the postganglionic parasympathetic fibres supplying the parotid gland?

(1.5+1+1.5=4 marks)

- 9. A 60-year-old woman was admitted to the hospital for treatment of an ulcer on her tongue. Examination showed that the ulcer was on the right lateral margin of the anterior two-third and the biopsy revealed that it was malignant.
- 9A. What are the groups of lymph node to which this malignancy of the tongue may spread?
- 9B. Which groups of lymph node may be involved if
 - i. The ulcer is at the posterior one third of the tongue?
 - ii. The ulcer is at the tip of the tongue?
- 9C. Mention the sensory innervation of the tongue.

$$[1+(0.5+0.5)+2=4 \text{ marks}]$$

10. Describe the microscopic structure of the liver with the help of a neat labeled diagram.

(4 marks)

- 11. While examining a 25-year-old patient, it was noticed that the patient held his right forearm pronated and his hand and fingers were flexed. He had difficulty in gripping the objects with the right hand as the hand was always in the flexed position. On questioning, the patient said that he had a fracture of the right humerus in the middle of his arm a few years back.
- 11A. With your knowledge of anatomy, name the nerve which is likely to be injured during the fracture of his humerus. Give the origin and root value of that nerve.
- 11B. What are the muscles likely to be paralyzed in this patient?
- 11C. Why does this patient experience difficulty in gripping objects in his right hand?

$$[(0.5+1) +2+0.5] = 4 \text{ marks}]$$

12. Write a short note on the tympanic membrane.

(4 marks)

- 13. Following a total thyroidectomy for carcinoma of the thyroid gland, a 55- year-old male patient noticed tingling and numbness of the fingers, toes, and lips. Painful cramp of the hands and feet was also experienced. Laboratory examination of the blood revealed a fall in blood calcium level.
 - 13A. Which organs were damaged during the total thyroidectomy? Where are they situated?
 - 13B. Mention their development.
 - 13C. Mention the arteries which are ligated during total thyroidectomy. Name the nerves accompanying each of them.

$$(1+1+2=4 \text{ marks})$$

14. Describe the relations of prostate gland. Mention the lobes of the prostate gland. Name the arteries supplying the prostate gland.

$$(2+1+1=4 \text{ marks})$$